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COMNAVSUBFOR

(AS PREPARED)

Good morning, thank you, it's good to be here. Thank you Ted (Hack), Admiral Bowman, New London Submariners, Admirals, Captains of Industry, Leaders in our Undersea Technology Acquisition and Warfighting Communities, Ladies and Gentlemen. It is an honor and a privilege to be here and be back in Groton CT, the home of our submarine force. Before I get too far into my remarks, I want to take the opportunity to thank Joe Walsh and Jim Ratte for the work they've done to put this conference together. It takes a lot of work, especially if you consider all of the things that have happened over the last week or so preparing for and successfully dodging hurricane Isabel, something we weren't quite as successful doing down in Norfolk. We know what kind of work it takes for your staff to pull this conference together and I really appreciate it.

It's good to be with you here today and to talk with you about where the Force is today, but more importantly where we want to be in the future.

I want to acknowledge the creativity, ingenuity, and just plain, hard work of those of you in industry who have supported us in not only our day-to-day operations but in the transformational efforts of the Submarine Force over the years. I had the opportunity to observe first hand the contribution and performance of our ships in OPERATION IRAQI FREEDOM and it struck me just how far we have come in the decade plus since OPERATION DESERT STORM. Through our cooperative efforts, we are seamlessly connected at the joint and combined force level through Internet protocol communications and with equipment that ensures we can use every bit of the bandwidth we are given.

When the maritime component commander or the air component commander communicates with us, we are sounding more and more like everybody else and less and less like a unique submarine. Our weapons are not only precise, but we can deliver them in volume and we can launch on minutes notice as opposed hours. There is more good news that stems from this partnership. We have a new class of attack submarine, led by the VIRGINIA, that's very nearly ready for sea. We have OHIO class ballistic missile submarines being converted to SSGNs, a platform with capability potential we have only begun to imagine. You have, we all have, very much to be excited and proud about. However, this is not the time to be getting cocky and resting on your laurels. I'm going to ask more of you.

The CNO has given us the vision in SEAPOWER 21 to chart our course for the future, the future of this Force, and given us the standard to measure our progress. In his SEAPOWER 21 statement, the CNO said that we, and I'll quote, "often cite asymmetric challenges when referring to enemy threats, virtually assuming such advantages belong only to our adversaries. Sea Power 21 is built on a foundation of American asymmetric strengths that are powerful and uniquely ours. Among others, these include the expanding power of computing, systems integration, a thriving industrial base, and the extraordinary capabilities of our people, whose innovative nature and desire to excel give us our greatest competitive advantage." Now, when you translate these strengths into sea power through naval forces and then further translate sea power into sea superiority, you truly have an asymmetric advantage that will contribute to decisive victory.

We have seen it in our recent conflicts, the importance of access. When deprived of land bases for strike aircraft in OPERATION ENDURING FREEDOM, carrier based aviation and sea based cruise missiles provided the striking power required. Similarly, because we had sea superiority, and consequently ACCESS to littoral waters surrounding Iraq, we were able to amass unprecedented firepower, essentially invulnerable firepower, in range to support that campaign. We had a "SEA SHIELD" of sorts; it's just that in that campaign we didn't have to work very hard to get it because of limited Iraqi capability to deny us that access, and I suspect that was not lost on some of our potential adversaries. We can't expect, nor should we plan on things always being so comfortable. Our "SEA SHIELDs" of future conflicts and, consequently, our access will likely be threatened by diesel submarines, mines and high speed cruise missiles from sea and shore based launchers.

To be deterred or even impeded by these threats is unacceptable. So let's talk about the role of undersea warfare in the SEA SHIELD concept and in making sure our access is assured.

I remember a movie called "City Slickers". In that film there was this gnarly, old cowboy named Curly, played by a perfectly gnarly Jack Palance. Throughout this film Curly espoused the virtue of something he called "The One Thing". Whatever that "One Thing" meant to him, and I admit I never did really figure out what it was, it certainly helped to keep him focused on what was important to him. Well, I've got my own "One Thing" when it comes to where submarines fit in Sea Shield, and I won't be as cryptic as my friend Curly. We must be able to operate, with impunity, across our mission spectrum, in the contested littoral.

Assuming our potential adversaries learn from history and "harden the outer edge" of their maritime domain, a submarine's stealth and endurance will be essential to early and persistent access to the increasingly important pre-hostilities phase of any operation. We can't be deterred by the presence of mines. We must have the capability to locate, avoid, and if necessary neutralize those mines that are an impediment to sustained presence in the areas we deem to be operationally significant. We can't be deterred by enemy submarines. Whether operating independently or as an element of a combined arms task force, we must be able to locate, hold at risk, and destroy on call, any submarine that leaves port to threaten our forces. We must use our honed surveillance capabilities and the resultant profound situational awareness we develop to inform and advise the Joint Force Commander of the capabilities and intentions of our adversaries.

This may mean deployment and monitoring of a wide variety of unmanned netted sensors or execution of intrusive intelligence, surveillance, and reconnaissance, where joint special operations forces deployed ashore can either observe activity of the enemy directly or leave behind unattended ground sensors extending our reach ashore. We have to be there to prepare the battlespace such that the Joint Force Commander can engage the enemy with speed and decisiveness at a time of his choosing. This may mean more extensive mine survey, mapping, and neutralization. It may mean the rapid destruction of the submarine threat to allow access of our maneuver forces. And finally, when things go hot, we must be ready to mass fires and strike where necessary at a moment's notice to neutralize any threat to either our sea based or our maneuver forces.

Today we in the United States do have a competitive advantage in undersea warfare. Our expanding experience base of operating against quiet diesel submarines shows us that, while formidable, they are not "black holes". We're extending the range at which we can detect and track these contacts. Similarly, we are making significant progress in mine detection and avoidance through our experimentation with high frequency active sonars and by focusing the Force on practicing their skills on our mine seeded ranges.

We have the best littoral torpedo in the world with the MK 48 ADCAP, and it is getting better. We are experimenting with and deploying unmanned undersea vehicles designed to increase the fidelity, reach, and dwell of our sensors. Our relationship with special operations forces has never been closer. We are on the cusp of operationalizing an SSN/SOF capability as never before.

We've got an aggressive experimentation effort; it's a leader among the services in integrating innovative technology into submarines and testing them in realistic joint operating concepts. GIANT SHADOW was this year's mission evaluation of the warfighting power and flexibility of the SSGN/SOF striking group. It was in a Global War on Terrorism scenario and it was the first experiment under the Navy's SEA TRIAL process. It showcased the potential of what a large volume undersea platform can do for the commander. We're going to do it again in SILENT HAMMER, our next SEA TRIAL experiment on the SSGN. This time we're going to delve into the possibilities the SSGN will provide the Joint Force Commander in a regional conflict scenario. We have an additional series of experiments and demonstrations that are in progress to expand our budding capability to meld information operations with other submarine missions such as SOF delivery and support.

We are pursuing a disciplined, determined, problem-solving approach with focused management attention in all of these areas as we build ever more robust, real capability. Emphasis on "real" capability. While I am optimistic, I am by no means satisfied. We must not just get better we must dominate in this area.

So how can you help? It's approaching the time of year when everybody fills out their holiday wish list. I've filled mine out early, so here it goes.

First, let's talk about SSGN a bit. I mentioned earlier that the conversion is in progress and we've got an experimentation effort that is well underway. It is critically important that we deliver SSGN on time, ready to deploy and fight.

People are really getting excited over this capability. In June I had the opportunity to host the Chairman of the Joint Chiefs of Staff on an overnight ride on the USS RHODE ISLAND. I got to explain to him personally what it meant to take that wonderful ship the RHODE ISLAND and convert one just like it to SSGN and how that could be melded in with such capabilities as SOF and Strike and things we haven't begun to think of yet. He was struck by the idea to the point where he requested that we brief the Service Chiefs on the SSGN/SOF capability in an effort to spur thought on how to make it more joint. We will do that briefing next week. The week before last the CNO, when presented with the brief we prepared for the tank, commented that he could envision the SSGN as a large undersea "raiding platform" with SOF, strike, and surveillance, staged where we need it during the pre- hostilities phase of operations, on call to the joint force commander. This SSGN-SOF Strike Group, "Triple S G" I'll call it, is capable of a myriad of missions across the warfighting spectrum. Admiral Ellis at STRATCOM sees a clear role for the SSGN in his concept of Global Strike.

What I need for you to do is open your apertures looking for opportunities to exploit what we have in the huge undersea volume and large ocean interface of the SSGN and to demonstrate the true joint warfighting capability it brings. Admiral Bowman has urged us to "Get Real" with technology and get real hardware and software in the operating environment quickly, test it, and build on successes. This is particularly applicable to the SSGN. That same attitude applies to development of joint operating concepts. We need smart people looking beyond the obvious, developing and testing new ways to integrate into the joint force and ensuring that our solutions remain compatible in the joint architectures of the future.

Item two, Connectivity. I think you've gotten the picture of our submarines operating in hostile waters, close to enemy shores, where others are denied access, for extended periods of time. If we are going to be effective in this joint force, we not only have to be there, but we have to be connected and able to exchange information with the joint force. Warfighting today demands real time, high bandwidth communications and that demand is only going to increase. Further, we are going to have to be able to communicate without yielding our stealth. We have to continue to pursue communications at speed and depth. There are solutions out there that show tremendous promise, we want to test them. We need technology to increase our communications capacity and make more efficient use of the bandwidth we have. If there's anything IRAQI FREEDOM taught us it's that we'll use every bit of bandwidth we have and then some. This connectivity is not only critical outside the hull; it is critical inside the hull as well. What I mean by that is our tactical systems must be fully integrated inside the ship. The days of developing and delivering independently operating and singular function tactical decision aids should be over. It is asking too much of our Sailors to operate and maintain them and to stay trained on them, and we can't afford it.

Item next, Weapons and Sensors. If submarines are going to be a persistent force in the contested littoral, in the very van of the SEA SHIELD for our operating forces, we are going to need a wider variety of sensors and weapons that give us more response options and keep us in the fight longer.

For instance, we should be able to engage small, high-speed vessels or aircraft that could threaten our battle forces or be impediments to either our freedom of movement or the movement of our Special Operations Forces. We need a fires capability that is immediately responsive, at the tactical level, to the land component commander's requirements at any time in the campaign. Off board sensors, aerial, underwater, unattended, that expand our reach and accelerate our sweep rate will significantly improve our effectiveness. Additionally, our off board sensors should have the capability and connectivity to fill critical tactical and operational ISR gaps for the Joint Force Commander. These are only a few examples; I am sure there are more ideas out there, and this is exactly the right group to be thinking about those things.

Let me drill down a bit to some specific issues:

- **The ADCAP torpedo, as good as it is, must become more reliable and more environmentally capable. We are extending the range of detection with our Acoustic Rapid COTS Insertion and our Advanced Processing Build program, but we need to work similarly to extend the engagement effectiveness of our torpedoes.**

- **The TOMAHAWK cruise missile was clearly showcased in Operation Iraqi Freedom. And I'm sure you're with me, I could not have been prouder of our crews' ability to deliver the goods during that conflict. Our years of training, grooming and incremental improvement on the TOMAHAWK system clearly paid off, but there is still room for both system and weapon improvements. My partner and CTF 54 during Iraqi Freedom, Rear Admiral Joe Enright, I think he would agree with me when I say that there is too much overhead associated with system grooms and reliance on real time "technical chat" and Sailor savvy to achieve weapons reliability standards. As we have come to expect, our crews and technical support folks did a great job overcoming some system and weapon faults to ensure we put steel on target when it was needed. But we can take some lessons learned, and we can make system improvements to make the TACTOM even better.**

- **As promising as our advances are in processing sensor information, I am less sanguine that we are where we need to be on the wet end of the problem. We need to match our processing gains with improved sensor capability.**

· I am very encouraged with the gains we have made in high frequency passive and active sonar performance and specifically its contribution to mine warfare, collision avoidance and close-in tactical control. We have to be able to do that and we're getting there. It has directly translated into improved submarine operating and tactical capability in the littorals. However our towed sonar systems are still burdened with handling system reliability issues. We have got to improve the duty cycle of these arrays and the arrays have to be able to detect and track during own ship maneuvers and they must remain usable at the tactical speeds we expect to see in the contested littoral.

Item last, People. We've got a tendency at gatherings like this to focus on high-minded strategies, visions, and cleverly designed hardware and software. Based on what I have chatted about so far, i'm guilty as charged. Let me shift the tack though, for a moment, and talk about our people and what they need from you.

I marvel every time I go on one of our ships and see the proliferation of advanced technology and the exponential progression of capability that it brings with it. I love gadgets and I'm easily entertained. However, in the same vein, I am concerned with that same explosion of capability and what it means in terms of preparing our fine Sailors to get the most warfighting utility from what it is we are giving them. We need help in a couple of areas. First, I've touched on this briefly before, but, we need better integration of the data and information in these tactical systems and more intuitive displays and decision aids. I don't know how many of you've had the opportunity to go on a LOS ANGELES class submarine recently, but if you get the chance you ought to do it and look at the dozens of flat screens we have in the control room, with the mind boggling number of displays options on each one of them.

We have inundated the watch standers with data and, in many cases, with the expectation that they will interpret and synthesize it into tactically meaningful knowledge, and then act upon that knowledge. I don't think that is what happens as frequently as we would hope. Why is it that the PCO Instructors and Tactical Readiness Teams tell me that during sub on sub engagements submarine initial detections are most frequently made by the Commanding Officer? Not the operator on the stack. Why is it that during battlestations, we see over 30 people in the Control Room of a submarine? The Sailors are taking this issue on themselves. Converting data to knowledge using brute force more manpower. Is that all we want from this processing capability? We can do better. We will do better. I am particularly pleased to see the addition of a Human Systems Integration working group to the technical agenda.

Second, we need help in getting more efficient and effective in our training, particularly in our tactical systems. If you combine the multi-mission responsibility we put on our crews these days and add to that the rate of change of capability that we are now able to deliver to our ships, I question whether we can achieve true competence in our employment if we train the way most ships are training today. It's kind of the same way I was doing it when I was in their shoes. There's a little more automation. We're a little more clever in our Power Point slides. But I think we're only nibbling around the edges. Admiral Bowman's folks at Naval Reactors are taking a bite out of it with the Interactive Display Equipment for propulsion plant training. It's a great option. It's a great choice. It's going to make a difference. It's going to make us more efficient. Similarly, higher fidelity shore tactical and navigation trainers have great potential.

But along with those, we need better sharing of knowledge and best practices among our crews, better tools and techniques for self assessment, and better leveraging on knowledge residing in our shore school and in our technical institutions.

Let me wrap up with a few final thoughts for you.

First, always remember, we are a part of a team much broader than just our Submarine Force. It's a Navy team. It's a joint team. Sea Power 21 envisions, and I'll quote, "future naval operations that will use revolutionary information superiority and dispersed, networked force capabilities to deliver unprecedented offensive power, defensive assurance, and operational independence to Joint Force Commanders. Our Navy and its partners will dominate the continuum of warfare from the maritime domain—deterring forward in peacetime, responding to crises, and fighting and winning wars", end of quote.

We, the submarine force, have a vital role to play in this concept. We need to keep thinking hard about joint and combined operations at all levels, and especially, because no one else is going to do it for us, at the tactical level.

Second, we need to be careful shepherds of the force's fiscal resources. Now be careful here. I'm not looking for Saks Fifth Avenue stuff at K-Mart prices. I know you get what you pay for. As we embark on spiral development programs to rapidly field capability to the fleet, we need to ensure that we go about it as efficiently as we can. Experimentation and spiral development imply there will be some failures. That's o.k., but we need to make sure that we carefully assess, as best we can, the technical and programmatic risk as we head down those paths.

Finally, always think about those operators out there. Those fleet sailors. If we haven't made it measurably more capable, easier to operate and more efficient, then we probably need to take another look at it before we deliver it to the fleet. We owe it to our Sailors.

I thank you for your time today. I couldn't be more thrilled to be here. I couldn't be more thrilled to be in this job. It's the dream of a lifetime. It's exciting; it's challenging; it's a great time for our undersea forces, our Navy, and our Nation. We, collectively in this group, have had some significant successes in the past. You have made a significant contribution to that. The talent we have here in Dealey Center today speaks to the tremendous potential of the future. I look forward to hearing all the agenda's speakers here today and look forward to talking with many of you during the course of the conference. Thank you NDIA for sponsoring this event.